

## NOTES ON GEOGRAPHIC DISTRIBUTION

### Mollusca, Bivalvia, Mycetopodidae, *Anodontites trigonus*: Southern dispersion in the Uruguay river

Cristhian Clavijo  
José Olazarri

*Museo Nacional de Historia Natural.*  
C.C. 399. Montevideo, Uruguay. E-mail: mycetopoda@yahoo.com.ar

The zoogeographic links between the freshwater fauna (sponges, molluscs and fishes) of the mid Paraná river and the Uruguay river have been noticed by different authors (Ihering 1919; Bonetto 1961; Parodiz 1963; Bonetto and Ezcurra 1966; Bonetto 1967; Bonetto et al. 1983; López et al. 2008). Three species of freshwater mussels of the family Mycetopodidae, *Mycetopoda soleniformis* (d'Orbigny, 1835), *Lamproscapha ensiformis* (Spix, 1827) and *Anodontites trigonus* (Spix, 1827) have been registered for the first time in the mid Uruguay river in the last years (Olazarri 1979; 1985; Mansur et al. 2003). These typically Amazonian species would be undertaking a process of austral propagation (Bonetto et al. 1983).

*Anodontites trigonus* is distributed in the Paraguay river, upper, mid and lower Paraná river, as well as in *Río de la Plata* where its occurrence is unusual (Bonetto et al. 1983; Castellanos and Landoni 1990). In the Uruguay river basin, its distribution would be restricted to the Ibicuí river and other affluents of the mid Uruguay river, next to the municipality of Uruguayana (Rio Grande do Sul, Brazil) (Mansur et al. 2003). Given the nearness of these records to Uruguayan territory, Scarabino and Mansur (2008) commented that the current presence of this species in Uruguay or its imminent dispersion towards this country were highly probable.

Between years 1978 and 1981 both margins of the Uruguay river were sampled monthly, by one of us (JO), in the zone of Salto Grande dam's lake, between Monte Caseros (Argentina) and Concordia (Argentina). In this date, neither *A. trigonus* nor *L. ensiformis* were detected.

On March 2008, one of us (CC) collected 15 recently dead specimens (only paired valves conserved) of *A. trigonus* (Figure 1) near to the Salto Grande Dam (31°15'58" S, 57°54'35" W). The material was collected in the shoreline during a period of low water level (*ca.* 3 meters less) and was deposited in the Malacological Collection of *Museo Nacional de Historia Natural*, Montevideo (MNHN 15524).



**Figure 1.** External view of right valve of *Anodontites trigonus*.

This new occurrence confirms the presence of the species in Uruguay, and extends its distribution by *ca.* 250 km from São Marcos (Castillos et al. 2007), supporting the hypothesis of the dispersion towards the south, proposed by Bonetto et al. (1983).

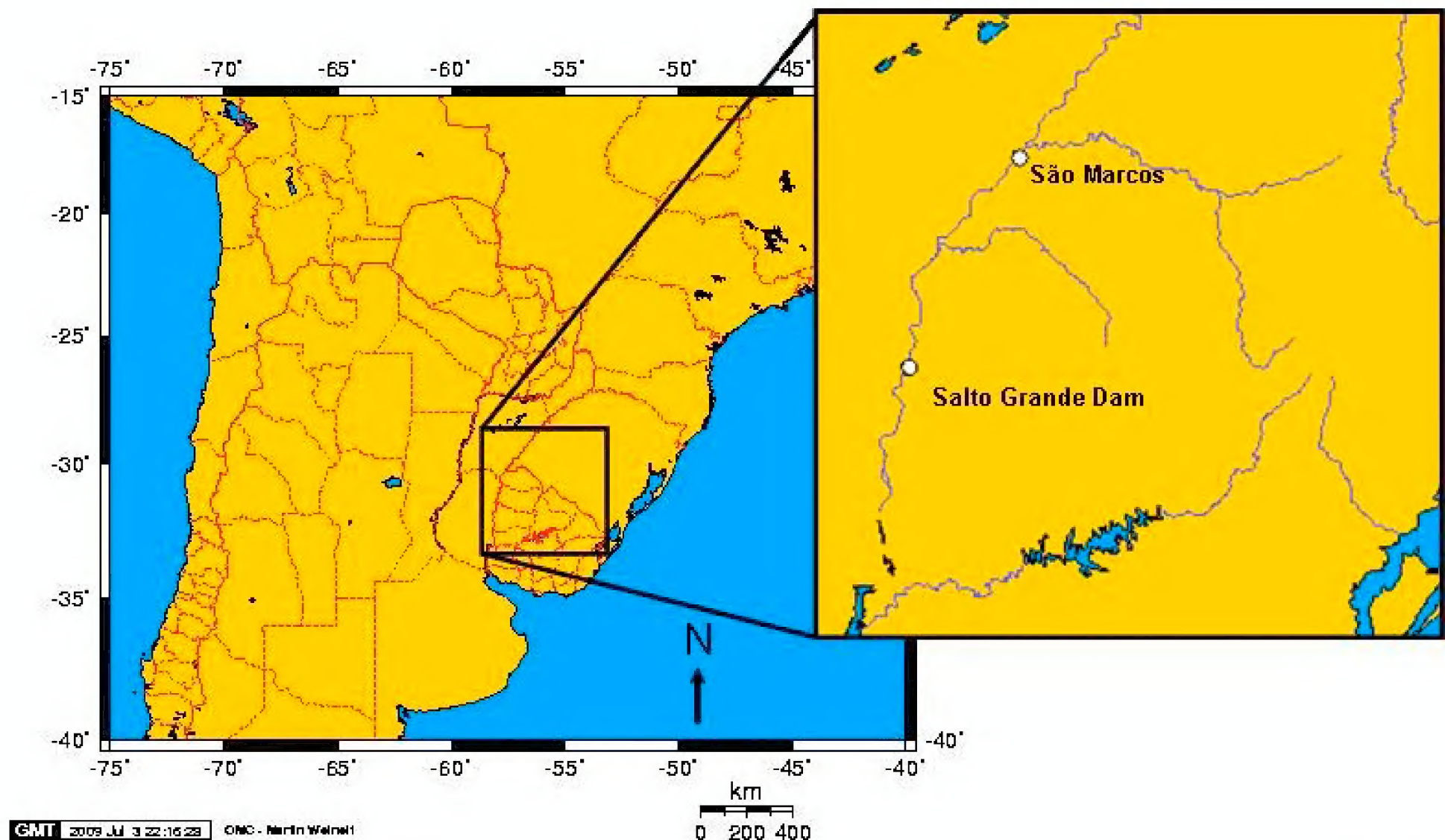
Mansur et al. (2003) places *A. trigonus* as vulnerable in the IUCN red list of the state of Rio Grande do Sul, Brazil. Competition with the



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exotic bivalves *Corbicula fluminea* (Müller, 1774) and *Limnoperna fortunei* (Dunker, 1857) is one of the threats faced by *A. trigonus* (Mansur et al. 2003). Those invading species are currently present in the lake of Salto Grande Dam (CC,

pers. obs.). Further studies are needed in order to determine whether the population of *A. trigonus* in its southernmost known locality in the Uruguay river is reproductively active or if they constitute only a marginal population.



**Figure 2.** Distribution map of *Anodontites trigonus* in the Uruguay river, indicating the previous known locality (São Marcos) and the present record (Salto Grande dam).

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